

Integrating the Brief Mental State Examination with the General Physical Examination: A Practical Framework for Holistic Clinical Care

Yakubu Anas Ibrahim^{1*,2}, Abdullahi Ibrahim³, Baguda Suleiman Abubakar³

^{1*}Department of Psychiatry, Federal University Birnin-Kebbi, Kebbi State, Nigeria.

²Department of Behavioral Sciences, Federal Teaching Hospital, Birnin-Kebbi, Kebbi State, Nigeria.

³Department of Clinical Services, Federal Neuropsychiatric Hospital, Kware, Sokoto State, Nigeria.

* **Correspondence:** Yakubu Anas Ibrahim

The authors declare that no funding was received for this work.



Received: 06-April-2026

Accepted: 05-May-2026

Published: 11-May-2026

Copyright © 2026, Authors retain copyright. Licensed under the Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

<https://creativecommons.org/licenses/by/4.0/> (CC BY 4.0 deed)

This article is published in the **MSI Journal of Medicine and Medical Research (MSIJMMR)**

ISSN 3049-1401 (Online)

The journal is managed and published by MSI Publishers.

Volume 3, Issue 2 (May-Aug), 2026

ABSTRACT: Psychiatric disorders among patients with physical or general medical conditions are a frequent occurrence; however, they are seldom recognized in non-psychiatric consultations, especially in low and middle-income countries. Globally, the point prevalence of mental disorders is one in eight, with a substantially higher rate among people diagnosed with general medical conditions. Diagnostic oversight of these comorbid mental health conditions can have devastating consequences, including difficulty adhering to treatment, diagnostic delays, higher health care utilization, and higher morbidity and mortality. This manuscript contends for a brief mental state examination to be routinely integrated into the general physical examination conducted by all physicians. An ultra-short and simplified four-item screening psychometric tool for the mood, orientation, and psychotic symptoms is advocated for as a possible assessment framework that can be integrated into the general clinical practice without rigorous specialist psychiatric training.

Integrating a brief mental state examination as part of physical examination will promote comprehensive care, facilitate prompt detection, and timely referral. This form of clinical practice has the potential to better affirm the definition of the World Health Organization about health as a complete state of physical, mental, and social well-being and not merely the absence of disease or infirmity.

Keywords: *Mental health, Physical health, Health, WHO, Brief Mental State Examination*

Introduction

Mental State Examination is paramount in assessing the mental health of individuals with or without physical ailments. Given the close link between mental and physical health, integrating a Brief Mental State Examination (BMSE) into routine clinical practice is a timely and necessary change. There is no doubt that the general physical examination remains central to clinical assessment. However, the mental state examination, which is frequently underutilized outside psychiatric settings, also has a huge role to play. Indeed, any clinician committed to achieving holistic patient management within the context of an established therapeutic alliance must proactively assess for signs of psychological decompensation. Neglecting this aspect constitutes a deviation from the World Health Organization's comprehensive definition of health, which it defines as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity (1). Mental disorders are generally very prevalent in the general population. A point prevalence of 1 in 8 was reported in 2019 by the World Health Organization (WHO). Furthermore, the WHO estimates that approximately one in four individuals will develop a mental illness, and one in three will experience a mental and/or neurological disorder at some point in their lifetime (2). As medical practitioners, we hold the capacity—and responsibility—to address both somatic and psychiatric dimensions of general health, and where appropriate, initiate timely referrals for specialized mental health evaluation and management.

The current paper recommends integration of a brief assessment of mental state in our routine general physical examination by all physicians, irrespective of their

specialty. It will represent a clinically relevant and essential shift aimed at achieving better holistic patient care

Prevalence of mental disorders in general medical settings

Genetic predisposition and environmental factors may independently predispose, precipitate, or perpetuate psychiatric disorders even before the onset of physical disease; however, the presence of comorbid physical illnesses substantially elevates the risk of psychiatric morbidity far above the rates estimated earlier by the WHO, with prevalence rates demonstrating considerable variability depending on the underlying medical condition and clinical setting (3). Among hospitalized cohorts, high rates of psychiatric disorders have been documented: 38–56% among patients admitted to internal medicine wards (4); 48% among individuals in intensive care units (5); 53.1% of surgical patients exhibiting mental distress, with 29.6% fulfilling diagnostic criteria for psychiatric disorders(6); and 37.5% among obstetric inpatients(7). Furthermore, a psychiatric morbidity prevalence of 47% has been reported among oncology patients (8) and 18% among pediatric outpatient clients (9). The elevated risk of psychiatric morbidity persists beyond hospital discharge. Notably, a 5-year follow-up study among intensive care unit (ICU) survivors reported an incidence of mental disorders as high as 42.7% (10).

Relationship between mental disorders and general medical conditions.

Considering the large prevalence of mental illness among patients with physical illnesses, it is noteworthy that comorbidity is the rule rather than the exception. This frequent occurrence arises because physical conditions do not confer immunity against mental disorders, and vice versa; in fact, they share a bidirectional relationship. Beyond coexistence, certain medical illnesses have psychic clinical manifestations exemplified by systemic lupus erythematosus (SLE) that frequently present with depression, cognitive dysfunction, and anxiety (11). Similarly, some psychiatric disorders may have medical manifestations; for instance, anorexia nervosa has dyselectrolytemia and superior mesenteric artery syndrome as some of its clinical symptoms (12). Furthermore, psychotropic medications (for the management of mental illnesses) can induce medical complications: second-

generation antipsychotics are linked to metabolic and endocrine side effects like metabolic syndrome, elevated blood sugar, diabetes, high cholesterol, and hypertension, while first-generation antipsychotics are associated with neuroleptic malignant and extrapyramidal symptoms, including Parkinsonian syndrome (13). Conversely, the conventional non-psychotropic drugs exemplified by the antihypertensive agent alpha-methyldopa have been associated with the onset of depression (14). Medical conditions can give rise to psychiatric complications; for instance, dementia may be complicated by behavioral and psychological symptoms of dementia (BPSD) and, in some cases, superimposed delirium (15). Furthermore, adapting to debilitating physical conditions, such as post-amputation status, often precipitates significant psychological reactions like adjustment disorder amputation (16).

Considering this intricate relationship between mental disorders and general medical conditions, having a distinct mental and physical assessment in our routine clinical practice is progressively difficult to validate.

Implications of sub-optimal recognition

Failure to recognize and appropriately manage mental illness in patients with physical conditions can lead to significant challenges, including diagnostic delays due to symptom overlap (e.g., anxiety mimicking cardiac issues) and treatment interference. Also, mental health disorders have the propensity to reduce adherence to physical disease treatments (17,18). Additionally, the presence of both physical and mental health issues is associated with higher mortality, undermining overall care goals (19).

The detrimental consequences linked with inadequate management of mental disorders in medical settings are largely attributed to the challenges in accurately identifying these conditions. For example, a study conducted at a General Hospital found that 61.5% of patients exhibited psychological distress; however, 98% of these cases went unrecognized (20). A similar trend was observed in a teaching hospital, where only 2.8% of mental health disorders were diagnosed among patients admitted to non-psychiatric wards (21).

Integrating a brief mental state examination into routine clinical practice

Incorporating part of the mental state examination into the general physical examination is critical for several reasons. Primarily, physical examinations are typically performed by all physicians who have established a therapeutic alliance with patients, facilitating the detection of psychiatric symptoms, regardless of the clinician's specialty. Early identification and timely intervention or referral by any competent physician are essential, as a significant proportion of mental illnesses begin early—50% by age 14 and 75% by age 24 (22). Early detection helps reduce the risk of severe complications.

Proposed ultra-brief four-item psychometric tool (To assess for psychic distress)

A set of four targeted questions can significantly enhance the assessment process. These include:

1. **Mood and Affect** – A quick assessment can help identify depressive, bipolar, and anxiety disorders.
2. **Perceptual disturbances** – Helps screen for primary and secondary psychotic illnesses.
3. **Unusual Beliefs** – Helps screen for primary and secondary psychotic illnesses.
4. **Orientation** – Helps assess for delirium.

Inappropriate behaviors, often perceived as grossly abnormal, can be reliably identified and reported by the patient or their relatives, just as overt physical symptoms (such as profuse bleeding) are recognized.

With little training, physicians can easily learn how to assess every patient during routine physical examinations. As medical students, the first examination we are taught is the general physical examination. Incorporating the brief mental state exam into this will make the training less difficult and promote a more holistic approach to patient assessment.

Implications for clinical service delivery and training

Accepting to integrate a brief mental state assessment as an integral component of physical examination can have profound implications for training both undergraduate

and postgraduate students well as clinical care. This will assist in normalizing this approach among clinicians across various specialties, thereby improving the holistic care of patients. This is even more necessary among low and middle-income states with little to no specialists to manage psychiatric disorders. Upskilling non-psychiatrists to be able to screen mental conditions is especially important because Such task shifting and/or task-sharing approaches can empower the early detection, prompt appropriate management and referral systems, thereby reducing the duration of untreated illness and improving the overall prognosis and quality of life.

Conclusion

The traditional distinction between physical and mental examinations is progressively inconsistent with the modern understanding of disease and health in general because of the intricate relationships between the physical and mental disorders, as well as the mind and the body. This low-cost and practical integration can assist in the early detection of mental health comorbidity in a physical setting. Therefore, detecting psychic distress should be a simultaneous engagement of psychiatric and non-psychiatric specialists in a way that painful and respiratory distress are detected by the duo.

References

1. Kühn S, Rieger UM. Health is a state of complete physical, mental and social well-being and not merely absence of disease or infirmity. *Surg Obes Relat Dis.* 2017;13(5):887.
2. Organization WH. Mental disorders [Internet]. 2022 [cited 2025 Apr 25]. Available from: <https://www.who.int/news-room/fact-sheets/detail/mental-disorders>
3. van Niekerk M, Walker J, Hobbs H, Magill N, Toynbee M, Steward B, et al. The prevalence of psychiatric disorders in general hospital inpatients: a systematic umbrella review. *J Acad Consult Psychiatry.* 2022;63(6):567–78.
4. Hansen MS, Fink P, Frydenberg M, Oxhøj ML, Søndergaard L, Munk-Jørgensen P. Mental disorders among internal medical inpatients: prevalence, detection, and treatment status. *J Psychosom Res.* 2001;50(4):199–204.

5. Nongmeikapam M, Reddy M, Chandrakumar RS, Narayan JS. Psychiatric morbidity in intensive care unit patients. *Ann Indian Psychiatry*. 2018;2(2):125–9.
6. Tesfa S, Giru BW, Bedada T, Gela D. Mental distress and associated factors among hospitalized medical-surgical adult inpatients in public hospitals, Addis Ababa, Ethiopia, 2020: cross-sectional study. *Psychol Res Behav Manag*. 2021;1235–43.
7. Jha S, Salve HR, Goswami K, Sagar R, Kant S. Prevalence of Common Mental Disorders among pregnant women—Evidence from population-based study in rural Haryana, India. *J Fam Med Prim care*. 2021;10(6):2319–24.
8. Derogatis LR, Morrow GR, Fetting J, Penman D, Piasetsky S, Schmale AM, et al. The prevalence of psychiatric disorders among cancer patients. *Jama*. 1983;249(6):751–7.
9. Jesmin A, Mullick MSI, Rahman KMZ, Muntasir MM. Psychiatric disorders in children and adolescents attending pediatric out patient departments of tertiary hospitals. *Oman Med J*. 2016;31(4):258.
10. Sareen J, Olafson K, Kredentser MS, Bienvenu OJ, Blouw M, Bolton JM, et al. The 5-year incidence of mental disorders in a population-based ICU survivor cohort. *Crit Care Med*. 2020;48(8):e675--e683.
11. Miliano C, Serpelloni G, Rimondo C, Mereu M, Marti M, De Luca MA. Neuropharmacology of new psychoactive substances (NPS): focus on the rewarding and reinforcing properties of cannabimimetics and amphetamine-like stimulants. *Front Neurosci*. 2016;10:153.
12. Cass K, McGuire C, Bjork I, Sobotka N, Walsh K, Mehler PS. Medical complications of anorexia nervosa. *Psychosomatics*. 2020;61(6):625–31.
13. Harrison P, Cowen P, Burns T FM. *Shorter Oxford Textbook of Psychiatry*. 7th ed. Oxford: Oxford University Press; 2018.
14. Henney N, Penson P. Do antihypertensive medicines increase the risk of depression? *Pharm J*. 2023;311.

15. Tible OP, Riese F, Savaskan E, von Gunten A. Best practice in the management of behavioural and psychological symptoms of dementia. *Ther Adv Neurol Disord.* 2017;10(8):297–309.
16. Jo SH, Kang SH, Seo WS, Koo BH, Kim HG, Yun SH. Psychiatric understanding and treatment of patients with amputations. *Yeungnam Univ J Med.* 2021;38(3):194–201.
17. Celano CM, Daunis DJ, Lokko HN, Campbell KA, Huffman JC. Anxiety disorders and cardiovascular disease. *Curr Psychiatry Rep.* 2016;18:1–11.
18. Owens PL, Heslin KC, Fingar KR, Weiss AJ. Co-occurrence of physical health conditions and mental health and substance use conditions among adult inpatient stays, 2010 versus 2014. 2018;
19. Association CMH, others. The relationship between mental health, mental illness and chronic physical conditions. C Ontario. 2008;
20. Mohammed A, Said JM, Wakil MA, Rabbebe IB, Sheikh TL, Agunbiade S. Unrecognized psychiatric disorders among adult patients admitted into a general hospital in Maiduguri, Northeastern Nigeria. *Pan Afr Med J.* 2014;19(1).
21. Uwakwe R. Psychiatric morbidity in elderly patients admitted to non-psychiatric wards in a general/teaching hospital in Nigeria. *Int J Geriatr Psychiatry.* 2000;15(4):346–54.
22. Illness NA on mental. *Mental Health By the Numbers.* 2025.